

€1,639 and €2,116, respectively, in prostate cancer. EPICUP was dominant versus ResponseDX in all adenocarcinomas. Regarding the comparison with diagnostic standard of care, the ICER was €15,972 for breast cancer; €25,932 for colon cancer; €36,125 per QALY for pancreatic cancer; €41,571 per QALY for NSCLC cancer; €28,881 per QALY for hepatocellular cancer; and €6,771 per QALY for prostate cancer. These results were robust across deterministic and probabilistic sensitivity analyses. **CONCLUSIONS:** From the Spanish NHS perspective, EPICUP is a cost-effective or dominant approach in comparison with other alternatives, including standardizing diagnostic methods (in this case when considering WTP threshold €50,000), in all carcinoma analyzed, while improving patient care.

PMD72

MODELING THE COST-EFFECTIVENESS OF A NEW COVERED STENT (WILLIS) VS. ENDOVASCULAR COIL OCCLUSION FOR THE TREATMENT OF INTRACRANIAL ANEURYSMS IN CHINA

Li L¹, Li M², Liu J³, Wan J⁴, Xie Z⁵, Wang W², Zhou Y³, Ding S⁴, Li B⁵, Li Z⁶, Xuan J⁷

¹Fudan University, Shanghai, China, ²Affiliated Sixth People's Hospital of Shanghai Jiao Tong University, Shanghai, China, ³Affiliated Changhai Hospital of Second Military Medical University Shanghai, Shanghai, China, ⁴Affiliated Renji Hospital of Shanghai Jiao Tong University, Shanghai, China, ⁵MicroPort Neurotech Company, Shanghai, China, ⁶Shanghai Centennial Scientific, Shanghai, China, ⁷Sun Yat-Sen University, Guangzhou, China

OBJECTIVES: To evaluate the cost-effectiveness of a new covered stent (WILLIS) vs. endovascular coil occlusion for the treatment of intracranial aneurysms in china. **METHODS:** A decision tree model was constructed and the treatment impact was projected up to 6 months. 88 endovascular coil occlusion treated initial intracranial aneurysms patients and 34 recurrence intracranial aneurysms patient (with aneurysm diameter > 7 mm) charts were reviewed and direct medical cost data were collected from hospital information system in multi-hospitals in 12 cities in China. Direct medical cost data, including drug cost, medical device cost, daily bed expenses, nursing fee, and examination cost were abstracted from the charts. The aneurysm recurrence rates by WILLIS and Coil treatments were obtained through literature review. The mortality rate of intracranial aneurysms recurrence, and side effects rates of treatments were collected through a direct expert survey. The main summary measure in this evaluation was incremental cost per death avoided. One way sensitivity analysis was performed to determine the robustness of the results. **RESULTS:** The total direct medical cost was 141,582.95 RMB and 177,407.35 RMB for Willis and coil occlusion treatments respectively; the recurrence rate of intracranial aneurysms was 0% and 28.9% for Willis and coil occlusion treatments in Chinese patients respectively; Relapse mortality of intracranial aneurysms is 0.2% in Chinese patients. The result suggests a dominant effect of Willis treatment over coil occlusion with an incremental cost-effectiveness ratio (ICER) of -63055263.7RMB/avoided death. This indicates that Willis treatment has demonstrated better efficacy and lower overall costs. The one-way sensitivity analysis didn't change the conclusion, indicating the robustness of the results. **CONCLUSIONS:** Compared with endovascular coil occlusion, a new covered stent (WILLIS) improves clinical outcomes and reduces overall medical costs for the treatment of Chinese intracranial aneurysms patients (Diameter > 7 MM).

PMD73

COST-EFFECTIVENESS OF SCREENING FOR COLORECTAL CANCER IN ARGENTINA

Maceira D, Espinola N, Palacios A

Center for the Study of State and Society (CEDES), Buenos Aires, Argentina

OBJECTIVES: The study -implemented after requirement of the National Cancer Institute (INC) - shows the results of a cost-effectiveness evaluation based on two alternative mechanisms: annual faecal immunochemical testing (FIT), and colonoscopy every ten years in Argentina. **METHODS:** The study develops a Markov model in ten stages, based on information provided by the INC, prior literature review and on-line questionnaires to physicians enrolled in the four major scientific societies related to cancer. Cost information arrived from the National Superintendence of Social Health Insurances and a sample of managers in social and private insurance schemes. **RESULTS:** The estimated model suggests that FIT annually applied becomes the most cost-effective screening method for CRC, in comparison with both no intervention and just colonoscopy. The incremental cost-effectiveness for annual FIT screening is USD 220.- per quality-adjusted life years (QALY) against no-intervention, and the cost-effectiveness ratio is low and acceptable considering the WHO criteria (per capita GDP), in comparison to the cost-effectiveness ratios of other cardio-vascular preventive interventions prices in Argentina. **CONCLUSIONS:** Results of cost-effectiveness analyses are often strong associated to disbursements related to specific performance indicators, such as the challenges of implementing such initiatives under budget constraints and/or availability and quality of equipments and human resources. These aspects were considered in the implementation of different scenarios in the sensitivity analysis, which includes adherence to treatments and capacity of accurate diagnoses, providing strength to the output reached in the research.

PMD74

A COST-EFFECTIVE ANALYSIS OF REVOLUTION CT FOR PATIENTS WITH ACUTE CHEST PAIN

He L, Yang L

Peking University, Beijing, China

OBJECTIVES: This study aimed to estimate the proportion of patients increasing while using revolution CT and to evaluate the impact of it in diagnosis time, length of stay, rate of direct discharge and hospitalization costs, while comparing to regular CT. **METHODS:** The data including rates, costs, time of diagnosis and length of stay, collected from literature reviewing and expert consultation, we use decision tree model to carry out a cost-effectiveness analysis by using treeage software. **RESULTS:** The study shows that with revolution CT, we can increase

the percentage of CCTA patients by 19.1%, shorter the diagnosis time by 8.45 hours, decrease the length of stay by 0.64 days, increasing direct discharge rate by 9% and lower median cost of care per patient by 600 yuan while comparing to regular CT. **CONCLUSIONS:** Results of this study indicate more serviceable patient population, faster hospital discharge, shorter diagnosis time, length of stay and lower hospitalization costs with the use of revolution CT. The revolution CT is more cost effective.

PMD75

COST-EFFECTIVENESS OF A LEFT ATRIAL APPENDAGE CLOSURE DEVICE IN PATIENTS WITH NON-VALVULAR ATRIAL FIBRILLATION UNABLE OR UNWILLING TO TOLERATE ORAL ANTICOAGULANT THERAPY IN ITALY AND SPAIN

Amin A¹, Cruz González I², Reddy V³, Holmes D⁴, Berti S⁵, Iñiguez Romo A⁶, De Deppo L⁷, Priest V⁸, Simmonds M⁹, Lee C¹, Wasserman M¹⁰, Margonato A¹¹

¹Double Helix Consulting, London, UK, ²University Hospital of Salamanca, Salamanca, Spain,

³Mount Sinai, New York, NY, USA, ⁴Mayo Clinic College of Medicine, Rochester, MN, USA,

⁵Fondazione Toscana G. Monasterio, Massa, Italy, ⁶Complejo Hospitalario Universitario,

Pontevedra, Spain, ⁷Boston Scientific Europe, Milano, Italy, ⁸Boston Scientific Asia Pacific, The

Metropolis Tower One, Singapore, ⁹Boston Scientific Australasia, Sydney, Austria, ¹⁰Double Helix

Consulting, New York, NY, USA, ¹¹San Raffaele Hospital, Milano, Italy

OBJECTIVES: Approximately 18-20% of non-valvular atrial fibrillation (NVAf) patients are unable or unwilling to tolerate oral anticoagulant therapy (OAT), leaving them at risk of stroke. Left atrial appendage closure (LAAC) device offers an alternative stroke risk reduction strategy that enables the majority of patients to discontinue long-term systematic OAT. Acknowledging both potential improvements in health outcomes and additional upfront implantation costs of a LAAC device, this study considers the lifetime costs and benefits of LAAC compared to aspirin plus clopidogrel (A+C) in high-risk NVAf patients ineligible or unwilling to take OAT from the Italian and Spanish public healthcare payer perspectives. **METHODS:** A Markov model was constructed to assess the cost-effectiveness of LAAC compared to A+C. Due to the lack of direct clinical trial data an indirect comparison was undertaken; having warfarin as the common comparator, PROTECT-AF (mean follow-up: 3.8 years) and ACTIVE-W (1.3 years) trials were used to indirectly compare LAAC against A+C. Clinical results were combined with cost and utility data to assess the relative cost-effectiveness of the device. Furthermore, to reflect the real-world patient population, patients were stratified according to the severity of stroke and bleeding using CHA2DS2-VASc and HAS-BLED scores. **RESULTS:** The base-case results demonstrate the LAAC as the cost-effective strategy compared to A+C in both countries with ICERs of €5,116 per life-year gained (LYG) and €3,942 per quality-adjusted life year (QALY) gained for Italy, and €10,298 per LYG and €7,683 per QALY gained for Spain. The ICERs per QALY gained are significantly below the willingness-to-pay thresholds generally accepted by each country: €25,000 in Italy and €30,000 in Spain. Results also demonstrate that the clinical benefit of LAAC becomes greater when risk of stroke and bleeding increases. **CONCLUSIONS:** LAAC device should be prioritised in patients who require an alternative to OAT and at relatively higher risk of stroke or bleeding.

PMD76

A COST-EFFECTIVE ANALYSIS OF THE OPTIMUM NUMBER OF BLOOD CULTURE FOR ADULT PATIENTS WITH INFECTION

He L, Yang L

Peking University, Beijing, China

OBJECTIVES: This study was carried out to assess, from the viewpoint of cost-effectiveness, the optimum number of blood cultures for adults patients with infection in China. **METHODS:** A decision tree was conducted for a cohort of Chinese adults aged 18 and above with infection and simulated the effects of only one-time, two-time and three-time blood cultures. The detection rate and survival rate of complications were main outcomes and infectious endocarditis, meningitis, septic shock and kidney failure were considered as complications of infection in the model. The cost of blood culture, antibiotics and complications, the detection rate, incidence and survival rate of complications were collected from literature reviews. Sensitivity analyses were conducted to evaluate assumptions of the model and to identify which model inputs had most impact on the results. **RESULTS:** The detection rate and the survival rate of complications were calculated as 65 and 97.9% for one-time blood culture, 80 and 98.0% for two-time blood cultures and 96 and 98.2% for three blood cultures, respectively. When using detection rate as outcome and willing to pay is more than RMB500 yuan, two-time blood cultures were cost-effective. The cost of blood culture and the detection rate will affect the results. When using survival rate of complications as outcome, two-time blood cultures was cost-saving and better than one-time blood culture. **CONCLUSIONS:** This analysis suggests that a 2-time blood culture collection method is recommended for blood culture for patients aged 18 and over with infection from the aspects of cost-effectiveness and diagnostic accuracy in China.

PMD77

VALUE OF ANTIDRUG ANTIBODY SCREENING IN MODERATE-TO-SEVERE RHEUMATOID ARTHRITIS PATIENTS WHO FAILED INITIAL TUMOR NECROSIS FACTOR-ALPHA TREATMENT

Dilokthornsakul P¹, Campbell JD²

¹Naresuan University, Muang, Phitsanulok, Thailand, ²University of Colorado Anschutz Medical Campus, Denver, CO, USA

OBJECTIVES: The development of antidrug antibody (ADAb) causes the failure of initial tumor necrosis factor-alpha blocker (TNF- α blocker) in rheumatoid arthritis (RA) patients. Patients who develop ADAb against 1st TNF- α blocker have a high likelihood of failing to 2nd TNF- α blocker. ADAb-screening is commonly used as a supportive tool for switching to 2nd TNF- α blocker or non-TNF biologics in Europe but not standard of care in the United States. Moreover, no evidence of value of ADAb-screening in RA patients exists. This study estimated incremental effectiveness and cost of